

## The role of physical activity and exercise in obesity. A position statement from the World Obesity Federation

Physical activity has significant health benefits for everyone, independently of the intensity at which it is practiced, and should be promoted as part of the response to treat and prevent non-communicable diseases. The impact of physical activity alone on weight loss alone is modest. Yet, its impact on general health, including the maintenance of healthier weight, should warrant that it be considered a core component of obesity interventions and that it ensure the sustainability of weight management programmes.

As addressing obesity is about more than just losing weight and includes improving overall health, the benefits associated with exercise should compel us to develop policies focused on supporting and enabling *all* people to engage in physical activity in our daily lives. World Obesity is committed to reframing the obesity narrative away from solely individual responsibility and ultimately ineffective “magic bullet” solutions to address the global obesity epidemic. Instead, we call for the inclusion of *all* factors related to the prevention, treatment and management of obesity. This includes dispelling existing misconceptions and promoting a better understanding of the role of physical activity and exercise in managing the disease.

*“Physical activity refers to all movement. Popular ways to be active include walking, cycling, wheeling, sports, active recreation, and play, and can be done at any level of skill and for enjoyment by everybody. Yet, current global estimates show one in four adults and 81% of adolescents do not do enough physical activity. Furthermore, as countries develop economically, levels of inactivity increase and can be as high as 70%, due to changing transport patterns, increased use of technology for work and recreation, cultural values, and increasing sedentary behaviours.”<sup>1</sup>*

Recognising the negative impact of physical inactivity, the World Health Organization (WHO) published the *WHO guidelines on physical activity and sedentary behaviour* (2020), providing global recommendations on the amount of physical activity required for different age and population groups (people living with chronic conditions, disabilities, and pregnant and postpartum women) to ensure health benefits and reduce the risk of adverse health outcomes.<sup>2</sup> Most age groups are advised to do at least 150-300 minutes of moderate-intensity aerobic physical activity throughout the week to help maintain a healthy body weight.<sup>2</sup> Further examples of national-level physical activity recommendations can be found on our [Global Obesity Observatory](#).

Despite modest weight loss associated with exercise alone, physical activity incontestably confers significant health benefits, and treating obesity is about improving overall health, not just about losing weight. It is indeed possible for a person with a higher body mass index (BMI) to be managing their disease and living at a ‘healthy weight.’

## What is obesity?

Obesity is a [chronic relapsing disease](#). WHO defines obesity as “abnormal or excessive fat accumulation that presents a risk to health.”<sup>3</sup> It is characterised by excessive fat tissue and can manifest as increased BMI, increased waist circumference and/or increased fat tissue percentage. Obesity is caused by “the interaction of environmental factors and genetic predisposition, leading to a positive energy balance, in which fuel intake exceeds energy expenditure.”<sup>4</sup> Learn more about obesity as a disease [here](#).

Obesity also increases the risk for other chronic diseases such as diabetes, cardiovascular disease, liver disease and certain cancers. It also increases the risk of harmful psychological, emotional and social outcomes, influenced factors outside of an individual’s control including weight bias and stigma. Weight stigma suggests that obesity is due to individual failure, and puts responsibility on people living with obesity to ‘fix’ it. It can damage mental and physical wellbeing and prevent people from seeking necessary medical care. Psychological impacts of obesity include poor body image, anxiety, stress, and depression.

## Eat less, move more alone does not work!

People with obesity are constantly shamed and blamed for their disease. This is because many people – including doctors, policymakers, and others – do not understand that obesity is a chronic disease. They see it as a simple lack of willpower, laziness, or a refusal to “eat less and move more.” But like all chronic diseases, the [root causes of obesity](#) run much deeper. They can be genetic, psychological, sociocultural, economic and environmental. It is time we break the cycle of shame and blame, and re-evaluate our approach for addressing this complex chronic disease that affects 650 million people worldwide.



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Three main components are involved in energy expenditure: the basal metabolic rate (the energy our body uses when it is resting), the energy used to break down food, and the energy used in physical activity.<sup>5</sup> Despite having very little control over our basal metabolic rate, it consumes most of our energy and accounts for 60% to 80% of total energy expenditure. Furthermore, both body movement and body size determine the energy expenditure induced by physical activity.<sup>6</sup> Despite common beliefs, evidence suggests that:

- When an individual experiences a rapid weight loss, a phenomenon known as “metabolic adaption” – a slowdown of the metabolic rate occurs and decreases the amount of energy spent. Evidence from “The Biggest Loser” Competition showed that this phenomenon may persist up to six years after the rapid weight loss.<sup>7</sup>
- Individuals using exercise as a weight loss mechanism tend to overestimate the amount of energy they spend and increase their caloric intake.<sup>8</sup>
- As pointed out by WHO and the Centers for Disease Control and Prevention (CDC), physical activity can be beneficial for weight maintenance.<sup>2,9</sup> The levels of physical activity required for that to happen differs from person-to-person as well as the type of activity one engages in. Furthermore, the CDC specifies that weight loss and maintenance requires the combination of **both** physical activity and a healthy eating plan.

## Health benefits associated with physical activity

Regular physical activity leads to a reduction in blood pressure and a decrease in the risk of developing hypertension, several types of cancer, osteoporosis, type 2 diabetes, stroke and heart attacks.<sup>10</sup> Independent of the intensity of physical activity in which individuals engage, further health benefits are conferred including a reduction in triglycerides and glucose, and an increase in HDL cholesterol.<sup>11</sup> Engaging in regular levels of physical activity also appears to reduce the risk of developing cognitive impairment from Alzheimer disease and dementia,<sup>12</sup> while simultaneously improving cognition in healthy individuals.<sup>2</sup> Finally, physical activity is also extremely beneficial for mental health through the secretion of certain hormones and can help improve sleep, our mood as well as manage stress, anxiety and depression.

The benefits associated with physical activity should compel us to develop policies focused on supporting and enabling all people to engage in exercise in our daily lives, including through professional, school, home, and other settings. These should include cross-sector and multi-stakeholder collaboration to build walking and cycling infrastructure, increase the access to and quality of public open and green spaces, improve road safety, and promote active transport.

## References

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